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### **REMARKS/ARGUMENTS**

Upon entry of the instant amendment, claims 1-12 are pending. Claims 13-24 have been withdrawn. The Applicant notes with appreciation the Examiner's finding that Claim 3 defines patentable subject matter. Claim 3 has been amended to independent form and thus should be allowable. Claims 1 and 4 have been amended to more particularly point out the Applicant's invention. Based upon the instant amendment and the remarks below, the Examiner is respectfully requested to reconsider and withdraw the rejection of these claims.

### **CLAIM OBJECTIONS**

Claim 1 was objected to based upon an informality as set forth in paragraph 3 of the Detailed Action. Claim 1 has been amended as suggested by the Examiner. Accordingly, this objection should be overcome.

### **CLAIM REJECTIONS – 35 U.S.C. § 103**

Claims 1 and 2 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Brighton et al, U.S. Patent No. 5,132,775 ("Brighton") in view of Rhodes et al, U.S. Patent No. 4,536,951 ("Rhodes") and Wolf, "Silicon Processing for the VLSI Era", Vol. 2, Process Integration ("Wolf").

It is respectfully submitted that the Examiner has failed set forth a *prima facie* case of obviousness for neither this rejection nor the rejections of claims 3-12 in which the Examiner combines from 3 to 5 references to support the rejections. In particular, in order to establish a *prima facie* case of obviousness, three criteria must be met as set forth in MPEP § 2143.

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination reasonable

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expectation of success must both be found in the prior art, not in the Applicant's disclosure."

It is respectfully submitted that there is no suggestion or motivation in the references to combine the reference teachings. It is respectfully submitted that there is absolutely no suggestion to combine the references as suggested by the Examiner. The Examiner simply states that "one of ordinary skill in the art at the time the invention was made would have been motivated to look to alternative suitable methods of forming the dielectric layer of Brighton et al. and art recognized suitability for an intended purpose has been recognized to be motivation to combine. MPEP 2144.07." The Applicant respectfully disagrees with this position by the Examiner for several reasons. First, MPEP § 2144.07 only applies in situations in which the only difference between the claimed invention and the reference is the use of a particular material. There are other differences here. It is respectfully submitted that even assuming *arguendo* that MPEP 2144.07 does apply, there are other differences between the claimed invention in claims 1 and 2 and the cited references. As such, *a fortiori* that the cited references fail to disclose all of the claim elements as also required by MPEP § 2143. In particular, the Applicant respectfully disagrees with the assertion that the "combined teachings of Brighton et al, Rhodes et al and Wolf substantially teach all of the aspects of the invention" (Page 4, Official Action). None of the references teach or disclose the process for forming the pillars as recited in claim 1. In particular, claim 1 recites that the pillars or vias are formed from a photoresist that is plated. As set forth in Col. 3, lines 52-54 of Brighton, the "pillars 16 and 18 comprise copper." Moreover as set forth in Col. 4, lines 56- 58, the pillars 16 and 18 are clad with tungsten 40, as best shown in Fig 5 of Brighton. Rhodes also discloses "metal pillars 10" Col. 3, line 3. Wolf is silent on this point. Thus, it should be clear that there are other differences between the claimed invention and the references other than the choice of coating materials and specifically the process for forming the pillars themselves- which is not disclosed or suggested by any of the references. For all of the

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above reasons , the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1 and 2.

Claims 4 and 5 have been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes and Wolf references and further in view of Lin US Patent No. 5,929,525 ("Lin"). Claim 6 has been rejected as been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes, Wolf and Lin references further in view of Tsai US Patent No. 5,252,515 ("Tsai"). Claims 7 and 8 have been rejected under 35 USC § 103(a) as being unpatentable over the Brighton , Rhodes and Wolf references and further in view of Hendricks et al US Patent No. 6,153,525 ("Hendricks"). Claim 9 has been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes, Wolf references and Hendricks references further in view of the Applicant's Admitted Prior Art. Claims 10 and 11 have been rejected under 35 USC § 103(a) as being unpatentable over the Brighton , Rhodes and Wolf references and further in view of Furukawa et al US Patent No. 6,387,783 ("Furukawa"). Finally, claim 12 has been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes, Wolf and Furukawa references and further in view of Samoto US Patent No. 5,583,063 ("Samoto").

In order to keep this response as brief as possible, the rejection of claims 4-12 is addressed collectively below. First, these claims are all dependent on claim 1. Thus the arguments set forth above with respect to claim 1 are incorporated by reference. The Brighton, Rhodes and Wolf references were discussed above. None of the other references disclose or suggest the process for forming the photoresist pillars as recited in claim 1. Moreover, it is respectfully submitted that the Examiner has failed to set forth a *prima facie* case of obviousness as required by MPEP § 2143. Indeed it is respectfully submitted that the Examiner is combining 4 and 5 references to support these rejections. Not only is there no suggestions within the references themselves to combine the references, but the references do not disclose all of the claim elements. In particular, the references do not disclose the method for forming the pillars, as

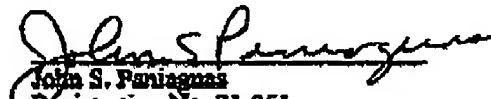
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discussed above. It is respectfully submitted that the Examiner is impermissibly combining the references using the claims as a blueprint. For these reasons and all of the above reasons, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 4-12.

Respectfully submitted,

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